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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,465	11/09/2001	Raymond Diaz	100.342US01	5014
34206	7590	08/02/2006	EXAMINER	
FOGG AND ASSOCIATES, LLC P.O. BOX 581339 MINNEAPOLIS, MN 55458-1339			WANG, TED M	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/008,465

Applicant(s)

DIAZ, RAYMOND

Examiner

Ted M. Wang

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 and 46-52 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 12, 28, 29, 37, 38, 53 and 59 is/are rejected.
- 7) ☒ Claim(s) 3-10, 13-21, 30-36, 39-45, 54-58 and 60-64 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 26, 2006 has been entered.

Response to Arguments

2. Applicant's arguments, filed on 11/2/2004, have been fully considered but they are not persuasive. The Examiner has thoroughly reviewed Applicants' arguments but firmly believes that the cited reference to reasonably and properly meet the claimed limitations.

Independent Claims 1, 11, 22, 28, 37, 46, 53, and 59

(1) *Applicants' argument* – "As discussed in the personal interview on May 11, 2006, a "relative time reference" as claimed in claim 1 is defined as a time reference that is "not tied to chronological time in the collection of system statistics" and "is specifically not updated when any communications device or system associated absolute time references are changed." Detailed Description, Paragraph 24. An "absolute" or "chronological" time reference as used in the present application is a time reference which is "updated or changed during system operation." Paragraph 6. ... The Examiner refers to "specific time intervals" discussed in

O'Reilly and states that "it is inherent that the specific time interval is generated from a relative time reference." However, nothing in O'Reilly teaches or suggests "generating a sequence of time intervals from a relative time reference," where the relative time reference is defined as discussed above."

Examiner's response –

The claim limitation of "a relative time reference" as recited in the above paragraph has not been defined in the claims 1, 11, 22, 28, 37, 46, 53, and 59, respectively. The limitation of "relative time reference" is a common/general description for a time or time interval generated by any time reference, thus, during patent examination, the pending claims must be "given their broadest reasonable interpretation" for this limitation.

O'Reilly's reference, column 1, lines 62-67 and column 3, lines 34-64, teaches that the statistics data are collected and stored in the respective storage files for predetermined time period/interval (column 1, lines 62-63). In column 3, lines 34-64, O'Reilly also teaches that the predetermined given time period/interval related to the collecting of the data statistics can be 5 minutes (lines 44-45), half hour (lines 49-51), or 20 minutes (lines 50-52). The time intervals in which statistics are rolled up from MTS system 12 to TVS system 16 may be varied. It is clear that the predetermined interval sequence is inherently generated based on a relative time reference in the relational database system for storing different types of data as taught by O'Reilly et al. Thus, for the explanation addressed in

the above paragraph, the rejection under 35 U.S.C. 102(b) with O'Reilly's reference is adequate.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 28, 29, and 59 rejected under 35 U.S.C. 102(b) as being anticipated by O'Reilly et al. (US 5,551,025).

- With regard claim 1, O'Reilly et al. discloses a method of collecting system statistics in a telecommunications device comprising:

generating a sequence of time intervals from a relative time reference (column 1, lines 62-63, column 5, lines 28-30 and column 3, lines 34-64, where it is inherent that the specific time interval is generated from a relative time reference);

gathering system statistics on a telecommunications device over the duration of each time interval (column 5 lines 28-30); and

storing a summarized record of the telecommunications device system statistics for the time interval at the conclusion of each selected time interval (column 1 line 38 – column 2 line 22 and column 5 lines 16-27).

O'Reilly's reference teaches that the statistics data are collected and stored in the respective storage files for predetermined time period/interval (column 1, lines 62-63). In column 3, lines 34-64, O'Reilly also teaches that the predetermined given time period/interval related to the collecting of the data statistics can be 5 minutes (lines 44-45), half hour (lines 49-51), or 20 minutes (lines 50-52). The time intervals in which statistics are rolled up from MTS system 12 to TVS system 16 may be varied. It is clear that the predetermined interval sequence is inherently generated based on a relative time reference in the relational database system for storing different types of data as taught by O'Reilly et al.

- With regard claim 2, O'Reilly et al. further discloses receiving a system statistics report request (Fig.1 element 46, 17, and 12, and column 3 lines 34-42); and sending the requested system statistics to the requestor (Fig.1 elements 12, 14, 16, 22, and 24 and column 3 line 34 – column 4 line 44).
- With regard claim 28, which is a telecommunication device claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 29, which is a telecommunication device claim related to claim 2, all limitation is contained in claim 2. The explanation of all the limitation is already addressed in the above paragraph.

- With regard claim 59, which is a method claim related to claim 1, all limitation is contained in claim 1. The explanation of all the limitation is already addressed in the above paragraph.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 12, 37, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Reilly et al. (US 5,551,025) in view of Henderson (US 6,647,109).

- With regard claim 11, O'Reilly et al. further discloses a telecommunication link with a modem (column 4 lines 14-44).

O'Reilly et al. discloses all of the subject matter as described in the above paragraph except for specifically teaching the modem is a G.SHDSL device. However, Henderson teaches a G.SHDSL modem device in a telecommunication system (Fig.2 element 220 and column 5 lines 1-8).

It is desirable to have a G.SHDSL modem device in a telecommunication system in order to reduce cross talk with great capacity. The reason for this is that G.SHDSL standard provides a method for transporting a full-duplex bit-stream of up to 2.3 Mbps over short loops. The standard provides for operation

that is rate-adaptive in nature, supporting payload rates ranging from 2.3 Mbps over 6 kft (26-AWG) loops to 192 kbps over loops as long as 18 kft (again, 26-AWG). A T1 rate (1.544 Mbps) can be supported over loops as long as 9 kft (26-AWG). This data distance profile (DDP) takes into consideration very high levels of cross-talk from adjacent loops in the same binder group. In conditions of low-noise, the capacity is much greater. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the apparatus/method as taught by G.SHDSL modem device in a telecommunication system in which having a G.SHDSL modem device in a telecommunication system, into O'Reilly et al. so as to reduce cross talk with great capacity.

- With regard claim 12, all limitation is contained in claims 2 and 11. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 37, which is a device claim related to claim 11, all limitation is contained in claim 11. The explanation of all the limitation is already addressed in the above paragraph.
- With regard claim 38, which is a device claim related to claim 12, all limitation is contained in claim 12. The explanation of all the limitation is already addressed in the above paragraph.

7. Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Reilly et al. (US 5,551,025) in view of Langberg et al. (US 5,852,630).

- With regard claim 53, O'Reilly et al. discloses all of the subject matter as described above except for the method written by a software program embodied in a computer-readable medium.

However, Langberg et al. teaches that the method and apparatus for a transceiver warm start activation procedure with precoding can be implemented in software stored in a computer-readable medium. The computer-readable medium is an electronic, magnetic, optical, or other physical device or means that can be contain or store a computer program for use by or in connection with a computer-related system or method (column 3, lines 51-65). One skilled in the art would have clearly recognized that the method of O'Reilly et al. would have been implemented in a software. The implemented software would perform same function of the hardware for less expense, adaptability, and flexibility. Therefore, it would have been obvious to have used the software in O'Reilly et al. as taught by Langberg et al. in order to reduce cost and improve the adaptability and flexibility of the communication system.

Allowable Subject Matter

8. Claims 22-27 and 46-52 are allowed.
9. Claims 3-10, 13-21, 30-36, 39-45, 54-58, and 60-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The following is an examiner's statement of reasons for allowance.

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- The prior art fails to teach a method/apparatus of Claims 22 and 46 that specifically comprises the following:
 - The instant application is deemed to be directed to a non-obvious improvement over the admitted prior art of the instant application and the invention patented in Pat. No. US 5,551,025, US 5,852,630, and US 6,647,109. The improvement comprises that -
 - gathering performance statistics on a G.SHDSL modem over the duration of each fifteen time minute interval;
 - storing a summarized record of the G.SHDSL compatible device performance statistics for each fifteen minute time interval at the conclusion of each selected time interval over a twenty four hour period;
 - and reporting the summarized record of one or more fifteen minute time intervals relative to a chronological time reference.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ted M. Wang whose telephone number is 571-272-3053. The examiner can normally be reached on M-F, 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on 571-272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ted M. Wang

A handwritten signature in black ink, appearing to read 'Ted M. Wang', with a stylized, cursive script.

Ted M Wang
Examiner
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